

## REMARKS

### Status of the Claims

- Claims 1, 3, 5-8, 10, 11 and 16-19 are pending in the Application.
- Claims 1, 3, 5-8, 10, 11 and 16-19 are finally rejected by Examiner.

### Claim Rejections Pursuant to 35 U.S.C. §103

Claims 1, 3 and 7-8 and 10-11 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,487,533 to Hyde-Thompson et al. in view of U.S. Patent No. 6,487,533 to Osborne and in further view of U.S. Patent No. 6,233,318 to Picard et al. Applicants respectfully traverse the rejection for several reasons.

With regard to independent Claims 1 and 8, the Examiner attempts to modify the teachings of Hyde-Thompson et al. with the teachings of Osborne to include an internal bus in the network interface unit of Hyde-Thompson et al. The combination is further modified to include the teachings of Picard et al. to include a Hyde-Thompson et al. network interface that supports an IP protocol (page 4 of Office action dated 5/4/05).

First, Applicants submit that the combination of Hyde-Thompson et al. with Osborne fails to teach all of the elements of independent Claims 1 and 8. Next, Applicants submit that the combination of Hyde-Thompson et al. with Picard et al. renders Hyde-Thompson et al. unsatisfactory for its intended purpose of performing internal multimedia processing in a unified system. Thus, the modification of Hyde-Thompson et al. with Picard et al. cannot create a prima facie case of obviousness according to MPEP 2143.01.

First, Applicants note that Hyde-Thompson et al. discloses a unified messaging system having a network interface unit which include conventional circuitry for the management of data transfers between a voice gateway and a computing network. As stated in Hyde-Thomson et. al.:

Referring now to FIG. 1, a block diagram of a preferred embodiment of a unified messaging system 100 constructed in accordance with the present invention is shown. The *unified* messaging system 100 comprises a set of telephones 110, 112, 114 coupled to a Private Branch Exchange (PBX) 120; a computer network 130 comprising a plurality of computers 132 coupled to a file server 134 via a network line 136, where the file server

134 is additionally coupled to a data storage device 138; and a voice gateway server 140 that is coupled to the network line 136, and coupled to the PBX 120 via a set of telephone lines 142 as well as an integration link 144. The PBX 120 is further couple to a telephone network via a collection of trunks 122, 124, 126. (col. 3, lines 45-57).

The network interface unit 202 preferably comprises *conventional circuitry* that manages data transfers between the voice gateway server 140 and the computer network 130. In the preferred embodiment, the processing unit 204 and the data storage unit 206 are also conventional. (col. 4, lines 43-48).

Hyde-Thompson et al. does not teach or suggest that NIU 202 has more than “conventional circuitry that manages data transfers between the voice gateway server 140 and the computer network 130.” Thus, Applicants submit that Hyde-Thompson et al. does not teach or suggest that the NIU 202 comprises a first interface to the messaging platform on the host computer, a second interface to a telephone network, and an internal bus coupled to a first module having said first interface and coupled to a second module having said second interface; and at least one embedded services processor (ESP) coupled to said internal bus supporting communications with said first module and said second module as recited in Claims 1 and 8. Nor does Hyde-Thompson et al. teach or suggest that the ESP within the NIU 202 comprises a processor, a memory, an operating system executing on said processor for executing software applications that are otherwise incapable of executing within said NIU, and a network interface that supports an IP protocol for communicating between said ESP and a network external to said messaging system as recited in Claims 1 and 8.

Additionally, as shown in Figure 2, Hyde-Thompson et al. depicts the “conventional circuitry” NIU 202 connecting to network line 136 and common bus 299. Outside the NIU 220, the common bus 299 interconnects the memory 210, having software voice messaging applications 220, a data storage unit having text to speech engines 245, a processing unit 204 and a voice board 200. Applicants note from Figure 2 of Hyde-Thomson et al. that the voice board 200 is connected to a PBX via lines 142 and not the NIU 202. It is the PBX of Figure 1 of Hyde-Thompson et al. which is connected to the telephone trunk lines 122, 124 and 126, not the NIU 202.

Accordingly, the “conventional circuitry” NIU 202 of Hyde-Thompson et al. does not even have a connection to a telephone network. (see Figure 2). Claims 1 and 8 recite a

telephone network connected to the network interface unit. Applicants note that Claims 1 and 8 do not recite a voice board, outside of the NIU, for an interconnection to a telephone trunk as taught by Hyde-Thompson et al. (see Figure 2). Applicants conclude that the topology of the messaging system of Claims 1 and 8 is dissimilar to that of Figure 2 of Hyde-Thompson et al. Further, Applicants submit that Hyde-Thompson et al. does not teach or suggest a modification to the conventional circuitry NIU 202 to include such elements as an internal bus, or a connection to a telephone trunk without a voice board 200 or PBX 120 or an NIU internal bus connection to an NIU internal embedded services processor.

The addition of Osborne does not remedy the failure of Hyde-Thomson et al. to teach an architecture that has an NIU that connected to a telephone network and an embedded services processor. Osborne teaches a network interface 66 that connects between a host computer 20 and a network of computers 24, such as an asynchronous transfer mode (ATM) network. (see Osborne Figure 3 and col. 10, lines 1-10.) Accordingly, the combination of Hyde-Thompson et al. and Osborne does not teach all of the elements of Claims 1 and 8. Specifically, the combination of Hyde-Thompson et al. and Osborne fails to teach a network interface unit that connects a messaging platform on a host computer to a telephone network and also connects via a bus to an embedded services processor.

Applicants note that the Examiner uses Picard et al. to support the teaching of a network interface unit that supports an IP protocol (page 4 of Office Action dated 5/4/05). Consequently, Picard et al. does not remedy the failure of the combination of Hyde-Thompson et al. and Osborne to teach the elements of a network interface unit having an internal bus, a connection to a telephone network, and an embedded services processor. Thus, the combination of Hyde-Thompson et al., Osborne, and Picard et al. does not teach or suggest all elements of Claims 1 and 8.

Next, Applicants note that Hyde-Thompson et al. discloses a multiplicity of text to speech converters and corresponding phoneme libraries, trigraph analyzers and corecurrence libraries to support the primary function of local language identification and text to speech conversion in the unified messaging system. As stated in Hyde-Thomson et al.:

The present invention is a *unified messaging system* providing automatic language identification *for the conversion of textual messages into speech*.(col. 2 lines 41-43).

The voice gateway server preferably comprises a voice board, a network interface unit, a processing unit, a data storage unit, and a memory wherein a set of voice messaging application units; a message buffer; *a plurality of text-to-speech engines and corresponding phoneme libraries*; a trigraph analyzer; and a set of corecurrence libraries reside.(col. 2, lines 54-59.)

In response to a text message review request, the message inquiry unit initiates *automatic language identification operations, followed by a text-to-speech conversion performed in accordance with the results of the language identification operations.* (col. 2, line 65 through col. 3, line 5).

The message inquiry unit subsequently selects a text-to-speech engine and an associated phoneme library, and *initiates the conversion of the text message into computer-generated speech* that is played to the subscriber in a conventional manner. (co. 3 lines 18-22).

Hyde-Thompson et al. teaches a unified messaging system providing automatic language identification for the conversion of textual messages into speech as a major aspect of the invention. Applicants note that Figure 2 of Hyde-Thompson et al. contains 5 instances of a text to speech (TTS) engines, 5 instances of phoneme libraries to be used with the TTS engines, 1 trigraph analyzer and 5 instances of corecurrence libraries to be used with the language determination and subsequent TTS conversion. Applicants submit that this large population of functionality supports the above cited text that a major purpose of Hyde-Thompson et al. is a single (unified) messaging system providing conversion of text to speech. Text to speech is a multi-media functionality. Applicants submit Hyde-Thompson does not teach or suggest performing the conversion of text to speech remotely as does Claims 1 and 8 with the use of an external server computer.

The Examiner proposes to modify Hyde-Thompson et al. with Picard et al. to include a network interface that supports an IP protocol. Claims 1 and 8 recite that an embedded services processor connects to an external network that connects to at least one external server computer useful for multi-media processing for the messaging platform. Thus, Claims 1 and 8 recite performing multimedia processing remotely. This is in distinction to Hyde-Thompson et al. which performs multi-media processing, such as text to speech conversion, wholly within the local voice gateway 140. There is no teaching or suggestion that Hyde-

Thompson et al. can be modified to use an external server computer, accessible via an embedded services processor within its NIU to perform multimedia processing remotely.

Applicants submit that the modification of Hyde-Thompson et al. with Picard et al. would render useless the multiplicity of internal NIU TTS engines and multiple internal support libraries of Hyde-Thompson et al. Generating a modification to a prior art reference that renders the prior art reference unsatisfactory for its intended purpose establishes that there is no suggestion or motivation to make the proposed modification (MPEP 2143.01). Therefore, a prima facie case of obviousness cannot be made by removing the intensive functionality of performing text to speech multimedia conversion from the unified messaging system of Hyde-Thompson et al. in order to perform those functions remotely. The modification of Hyde-Thompson et al. with the teaching of Picard et al. would render Hyde-Thompson et al. unsuitable for the purpose of a unified messaging system that performs text to speech conversion. Thus, Hyde-Thompson et al. cannot be modified by Picard et al. to form a prima facie case of obviousness because Hyde-Thompson et al. would be rendered unsatisfactory for its intended purpose (MPEP 2143.01).

Accordingly, there is no motivation to combine Hyde-Thompson et al. with any reference that would extract the multimedia functionality from Hyde-Thomson et al. This insight, along with the observation that combination of Hyde-Thompson et al. Osborne and Picard et al fail to disclose a network interface unit with a telephone network connection and an embedded services processor prompts Applicants to respectfully request withdrawal of the 35 USC §103 (a) rejection of Claims 1, 3, 7-8 and 10-11 because the rejection is improper and these claims patentably define over the cited art.

#### **Other Claim Rejections Pursuant to 35 U.S.C. §103**

Claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,487,533 to Hyde-Thompson et al. in view of U.S. Patent No. 6,487,533 to Osborne and in further view of U.S. Patent No. 6,233,318 to Picard et al. and in further view of U.S. Patent No. 5,283,879 to Carteau et al.

Claims 16-19 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,487,533 to Hyde-Thompson et al. in view of U.S. Patent No. 6,487,533 to Osborne and

**DOCKET NO.:** USYS-0065 (TN208)  
**Application No.:** 09/636,656  
**Office Action Dated:** May 4, 2005

**PATENT  
REPLY FILED UNDER EXPEDITED  
PROCEDURE PURSUANT TO  
37 CFR § 1.116**

in further view of U.S. Patent No. 6,233,318 to Picard et al. and in further view of U.S. Patent No. 6,396,907 to Didcock et al.

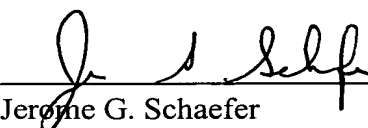
Applicants respectfully traverse these rejections. Claims 5, 6, 16 and 17 are ultimately dependent on independent Claim 1. Claims 18 and 19 depend on independent Claim 8. As mentioned above, Hyde-Thompson et al. cannot be combined with Picard et al. without rendering Hyde-Thompson et al. unsatisfactory for its intended purpose. Accordingly, a prima facie case of obviousness against Claims 1 and 8 cannot be made using any combination that includes Hyde-Thompson et al. Thus dependent Claims 5, 6 and 16-19 patentably define over the cited art as do independent Claims 1 and 8. Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of Claims 5, 6 and 16-19 as they patentably define over the cited art.

### **Conclusion**

In view of the above remarks, Applicants submit that the present application is in a condition for allowance. Applicants respectfully and earnestly solicit a Notice of Allowance for all pending claims.

Respectfully submitted,

Date: July 1, 2005

  
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